DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D117-837 Rev. A AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D117-837 Rev. 0 REF. TCCA STC: SH13-22

1.0 Purpose

The purpose of this Dart Service Instruction (DSI) is to provide instructions for upgrading the D117-837-011 Heli-Utility-Basket from CHG 002 to CHG 003 and to upgrade the D117-837-111 Provision mounting kit from CHG 001 to CHG 002. This change adds a quick release function to the D4784-011 Basket Assembly and its installation.

2.0 Installation of Quick Release System

- 2.1 Remove temporarily the D4794-041 Strut Assy from D4911-1/-3 Brackets and discard existing AN4-7 bolt,
- NAS1149F0463P washers and AN310C4 nut from both ends of strut assy.

 2.2 Remove temporarily the D4784-011 Basket Assy and discard existing AN4-13A bolts and washers.

 2.3 Assemble D5106-041 Bracket Assy onto D4784-011 Basket Assy using AN4-12A bolt, 2x NAS1149F0432P washers and MS21042L4 nut in four places as shown in Figure 1.
- 2.4 Remove D4895-041 Fwd Outboard Beam Assy and replace with D4895-045 Fwd Outboard Beam Assy. Assemble D4895-045 onto D4894-1 Fwd Beam using existing hardware as shown in Figure 2.
- 2.5 Remove D4895-043 Aft Outboard Beam Assy and replace with D4895-047 Aft Outboard Beam Assy.
- Assemble D4895-047 onto D4894-3 Aft Beam using existing hardware as shown in Figure 2.

 2.6 Install D4784-011 Basket Assy onto the new D4895-045/-047 Fwd/Aft Outboard Beam Assy using MS17984-C418 quick release pin from D5106-041 Brackets Assy as shown in Figure 2.
- 2.7 Install MS21919WCF8 clamps 0.4"-0.5" (10-13 mm) from ends of D4794-041 Strut Assy. Install D2690-6 Lanyard Assy into MS21919WCF8 clamp using AN3C3A bolt, 2x NAS1149C0332R washers and MS21043-3 nut on both ends of D4794-041 Strut Assy. Attach other end of D2690-6 Lanyard Assy to MS17984-C405 quick release pin prior to securing D4794-041 Strut to D4911-1/-3 Brackets as shown in Figures 3 and 4.

3.0 Parts List

Customers who already have D117-837-011 at CHG 002 can procure the DSI 9697-011 kit from Dart to upgrade their D117-837-011 Basket Kit from CHG 002 to CHG 003. IIN-D117-837 Rev. B and ICA-D117-

Rev. 1 reflect the updated parts list for D117-837-011 at CHG 003 and D117-837-111 at CHG 002.

Qty -011	Part Number	Description
Х	DSI 9697-011	QUICK RELEASE UPGRADE KIT
2	D2690-6	LANYARD ASSEMBLY
1	D4895-045	FWD OUTBOARD BEAM
1	D4895-047	AFT OUTBOARD BEAM
4	D5106-041	BRACKET ASSEMBLY
2	AN3C3A	BOLT
4	AN4-12A	BOLT
2	MS17984-C405	QUICK RELEASE PIN
2	MS21043-3	NUT
4	MS21042L4	NUT
2	MS21919WCF8	CLAMP
4	NAS1149C0332R	WASHER
8	NAS1149D0416J	WASHER

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION **BRANCH** DAO # 01-O-01

APBROVED D. SHEPHERD (DE # 02)

14.06.23 CERT. NO.: SH13-22 ISSUE NO .:

Α	NEW ISSUE			RF	14.06.23
REV.			DESCRIPTION	BY	DATE
DESIGN RF		RF	DART AEROSPACE LTD		
DRAWN		RF,	HAWKESBURY, ONTARIO, CANADA		
CHECKED		-#	DRAWING NO.		REV. A
MFG. APPR.		N/A	DSI 9697		SHEET 1 OF 4
APPROVED		411-	TITLE		SCALE
DE APPR.		-11	BASKET UPGRADE TO QUICK RELEASE NT		
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4.0 Weight & Balance

The Weight and Balance of the D117-837-XXX Kits are listed in the table below:

		LATERAL		LONG	LONGITUDINAL	
Installation	Weight	Arm	Moment	Arm	Moment	
D117-837-011 at CHG 003	120 lb	-35.1 in	-4212 in-lb	171 in	20520 in-lb	
(Heli-Utility-Basket™, LH Install)	54.4 kg	-0.89 m	-48.4 m-kg	4.34 m	236.1 m-kg	
D117-837-011 at CHG 003	120 lb	35.1 in	4212 in-lb	171 in	20520 in-lb	
(Heli-Utility-Basket™, RH Install)	54.4 kg	0.89 m	48.4 m-kg	4.34 m	236.1 m-kg	
D117-837-111 at CHG 002	38.4 lb	-12.7 in	-488 in-lb	167.4 in	6428 in-lb	
(Basket Provision Kit, LH Install)	17.4 kg	-0.32 m	-5.6 m-kg	4.25 m	74.0 m-kg	
D117-837-111 at CHG 002	38.4 lb	12.7 in	488 in-lb	167.4 in	6428 in-lb	
(Basket Provision Kit, RH Install)	17.4 kg	0.32 m	5.6 m-kg	4.25 m	74.0 m-kg	

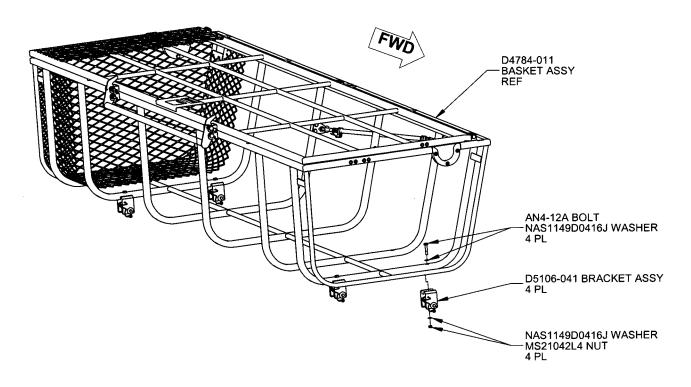


FIGURE 1. - INSTALLATION OF D5106-041 BRACKET ASSY ONTO D4784-011 BASKET ASSY (BASKET MESH NOT SHOWN FOR CLARITY)

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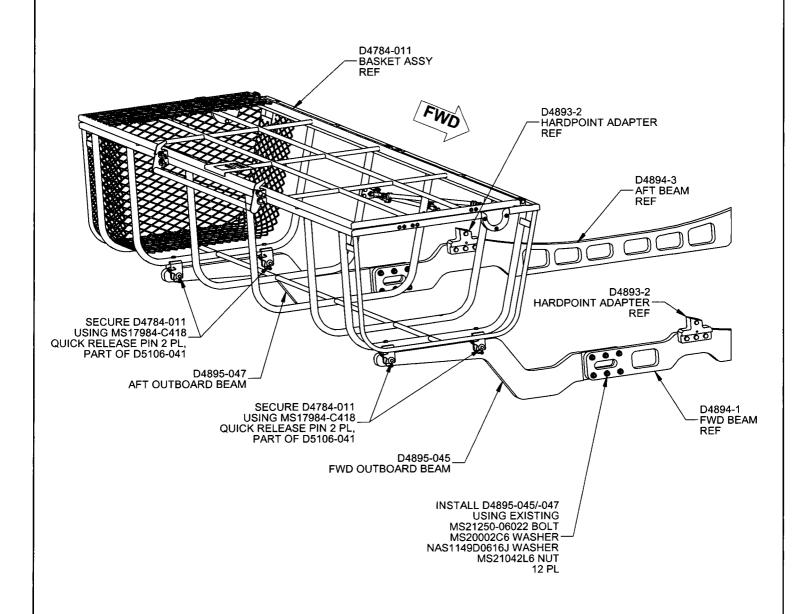


FIGURE 2. - D4784-011 BASKET ASSY INSTALLATION ONTO FWD/AFT BEAMS (BASKET MESH NOT SHOWN FOR CLARITY)

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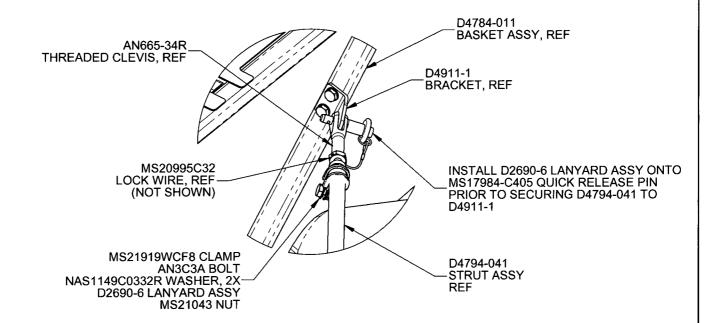


FIGURE 3. - STRUT ATTACHMENT TO D4911-1 (BASKET MESH AND LOCK WIRE NOT SHOWN FOR CLARITY)

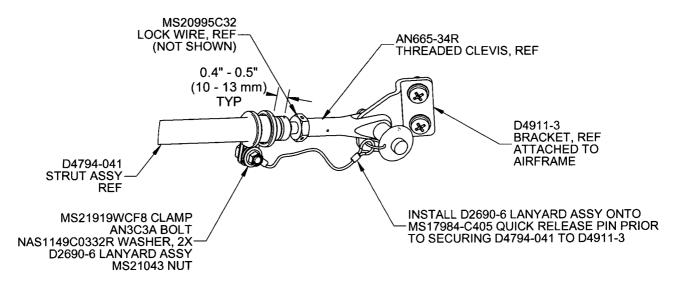


FIGURE 4. - STRUT ATTACHMENT TO D4911-3 (AIRFRAME AND LOCK WIRE NOT SHOWN FOR CLARITY)

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